

Serial No. 10/664,241

IN THE CLAIMS

Claim 1 (previously presented). A silent and reduced vibration chainwheel for meshing with a chain, and comprising:

a disk having an outer edge, two opposite sides and at least one recess;

multiple teeth formed with and extending radially out from the outer edge of the disk and forming a bottom land between adjacent teeth and each tooth having a tooth profile with a pitch point; and

an energy absorber made of resilient material and mounted at the outer edge of the disk in the at least one recess to absorb shock generated when the chainwheel and the chain contact each other, thereby reducing both vibrations and noise,

wherein the teeth are hollow to form a passage in each tooth;

the at least one recess in the disk is implemented with a continuous annular groove defined around the outer edge, and extending through and communicating with the passages in the teeth; and

the energy absorber comprises a continuous resilient annular strip mounted in the annular groove and extending through the passages in the teeth and around the outer edge.

Claims 2-6 (canceled).

Claim 7 (currently amended): The silent and reduced vibration chainwheel as claimed in claim 1, wherein the chainwheel further comprises:

two side disks smaller than the disk forming the chainwheel, having respectively outer edges and mounted ~~concentrically~~ on opposite sides of the disk such that the outer edges of the side disks form two annular shoulders respectively on opposite sides of the chainwheel disk at the teeth; and

the at least one recess further comprises the two shoulders, and the energy absorber further comprises two resilient annular rings mounted respectively on the annular shoulders.

Claim 8 (canceled).

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Claim 9 (currently amended). The silent and reduced vibration chainwheel as claimed in claim 1, wherein

the chainwheel further comprises:

two side disks smaller than the disk forming the chainwheel, having respectively outer edges and mounted ~~concentrically~~ on opposite sides of the disk such that the outer edges of the side disks form two annular shoulders respectively on opposite sides of the chainwheel disk;

the at least one recess is implemented with the two annular shoulders in addition to multiple passages defined respectively in the teeth and a central annular groove defined between the annular shoulders and passing through the teeth; and

the energy absorber is implemented with three resilient annular rings mounted respectively on the annular shoulders and in the central annular groove.

Claim 10 (canceled).

Claim 11 (currently amended): The silent and reduced vibration chainwheel as claimed in claim 9 ~~wherein~~ the energy absorber comprises multiple, continuous resilient annular strips extending through the passages in the teeth.

Claim 12 (currently amended): The silent and reduced vibration chainwheel as claimed in claim 7 ~~wherein~~ the energy absorber comprises multiple, continuous resilient annular strips extending through the passages in the teeth.

Claim 13 (currently amended): The silent and reduced vibration chainwheel as claimed in claim 1 ~~wherein~~ the energy absorber comprises multiple, continuous resilient annular strips extending through the passages in the teeth.